Model NV-8PS13-PVD

Power Supply Passive Video Receiver Hub

Front

Rear

Features:

- Provides Class 2 SELV camera power while receiving video transmission and delivering P/T/Z telemetry all over a single 4-pair Cat5e cable
- Standard telecom/datacom structured cabling pinouts per EIA/TIA 568B
- Independently selectable 24VAC-OFF-28VAC with 1 Amp per channel
- Automatic-reset fault protection; transient protection
- Individually floating outputs ensure total ground-loop immunity
- Diagnostic LEDs show load/no load, miswires, and overload conditions
- Use with the NV-216A-PV, NV-218A-PVD, or NV-226J-PV transceiver at the camera
- Power cameras via UTP over significant distances (see Power Distance Chart)
- 1U high; 8" deep; wall, desk, or rack-mountable, 2ft (60cm) BNC Cables included
- Limited lifetime warranty

The 8-channel NV-8PS13-PVD is a key hybrid component that consolidates all CCTV system cabling using standard EIA/TIA 568B structured building wiring. Designed for installation in the IDF/Telecom Closet or MDF/Equipment Room, the Power Supply Passive Video Receiver Hub has independently selectable 24VAC-OFF-28VAC outputs that can support at-distance camera loads up to 1 Amp per channel. Use with NVT's PVD™ transceivers for cable runs under 750ft (225m). A built-in passive receiver hub allows connection to DVR or an encoder for IP transmission. Per-channel diagnostic LEDs display load /no-load, miswires, or fault conditions at a glance. Automatic-reset fault protection, transient protection, and ground loop free individually floating outputs.

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Technical Specifications

WIRE DISTANCE (Power Distance Charts)

Supply voltage, wire resistance and minimum camera operating voltage determine the maximum camera distance. Examples assume a minimum 21VAC at the camera:

Fixed 24VAC Camera		NV-216A-PV
Power Supply Voltage	**24 VAC**	**28 VAC**
Minimum Voltage at Camera	**21 VAC**	**21 VAC**
B&W Camera 100 mA, 2.4 W		
2-pair 24 AWG	899ft (274m)	2,098ft (640m)
2-pair 23 AWG (Cat6)	1,134ft (346m)	2,645ft (807m)
Color Camera 200 mA, 4.8 W		
2-pair 24 AWG	450ft (137m)	1,049ft (320m)
2-pair 23 AWG (Cat6)	567ft (173m)	1,323ft (403m)
Color Camera 300 mA, 7.2 W		
2-pair 24 AWG	300ft (91m)	699ft (213m)
2-pair 23 AWG (Cat6)	378ft (115m)	862ft (269m)

P/T/Z 24VAC Camera		NV-218A-PVD
Power Supply Voltage	**24 VAC**	**28 VAC**
Minimum Voltage at Camera	**21 VAC**	**21 VAC**
P/T/Z Camera 1,000 mA, 2.4 W		
2-pair 24 AWG	90ft (27m)	210ft (64m)
2-pair 23 AWG (Cat6)	113ft (35m)	265ft (81m)

Fixed 12VDC Camera		NV-226J-PV
Power Supply Voltage	**24 VAC**	**28 VAC**
Minimum Voltage at Camera	**11.5 VDC**	**11.5 VDC**
B&W Camera 200 mA, 2.4 W		
2-pair 24 AWG	1,498ft (457m)	2,098ft (640m)
2-pair 23 AWG (Cat6)	1,889ft (576m)	2,645ft (807m)
Color Camera 400 mA, 4.8 W		
2-pair 24 AWG	874ft (267m)	1,174ft (358m)
2-pair 23 AWG (Cat6)	1,102ft (336m)	1,480ft (452m)

Notes: Wire should be Cat5 or better/ low voltage camera power, video and RS-422 or RS-485 data may reside within the same wire bundle, however do not run 24 or 28VAC within the same wire bundle as other telecom or datacom signals.

VIDEO

Frequency response	DC to 5 MHz
Attenuation	0.5 dB typ
Common-mode / Differential-mode rejection	
15 KHz to 5 MHz	60 dB typ
Impedance	
Coax, female BNC	75 ohms
UTP, RJ45	100 ohms
Network Wiring	One four-pair Cat5 or better per channel

CAMERA POWER

Each camera is powered by a fully isolated (floating) Class 2 SELV output, individually switchable 24VAC / OFF/ 28VAC at up to 1 Amp. Each output is individually thermistor protected.

POWER INPUT

Power inlet	IEC•with molded power cord (included)
Voltage	115 / 230VAC
Current	2.5 / 1.25 Amps
Protection	5x20mm type T fuse 2.5Amp 250V
Wattage	250 Watts
Heat	(power supply only) 100 BTU / Hour (power supply with cameras) 900 BTU / Hour

POWER OUTPUT

Each camera is powered by a fully isolated (floating) Class 2 SELV ouput, individually switchable 24VAC / off / 28VAC at up to 1 Amp. Each output is individually thermistor protected for auto-reset after fault removal.

FRONT PANEL LEDs

System Power:	Blue LED
Per-channel LED Indicates:	
Off:	No load connected
Green:	Load connected and working
Amber:	Mis-wiring detected
Red:	Overload fault condition

ENVIRONMENTAL

Ambient Temperature	-4 to +122 °F (-20 to +50 °C)
Minimum airflow	20ft^3/min (0,5m^3/ min)
Humidity (non-condensing)	0 to 95%
Transient Immunity	per ANSI / 587 C62.41

MECHANICAL

Dimensions, including connectors	
	19in wide, 1.73in high, 12in deep 43cm wide, 4,5cm high, 20cm deep
Weight	14lb (6,35kg)

ACCESSORIES (included)

Mounting	Rack mount “L” brackets for front, rear, or wall installations; rubber feet for desk applications
Cables	Eight 2ft (60cm) coax jumpers Molded IEC•power inlet cord 7ft (200cm)

OPTIONAL EQUIPMENT

Mounting	NV-RMBK2 Rear Mount Support Kit (designed for use with thinner metal equipment racks) NV-WMBK2 Wall Mount Bracket Kit (heavy duty)

REGULATORY

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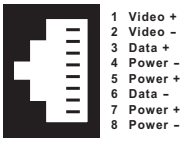
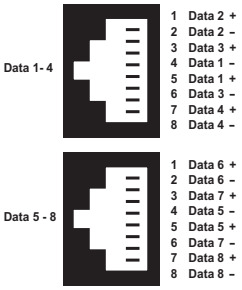
CAMERA PVD CONNECTIONS

Eight front-panel RJ45 outputs support up to eight fixed or P/T/Z telemetry cameras over 4-pair UTP Cat5 or better.



CONTROL ROOM DATA

RS-422 or RS-485 type P/T/Z telemetry / data signals are paralleled together in groups of four, and passed through the unit and delivered to the control room via a rear-panel RJ45 connector.

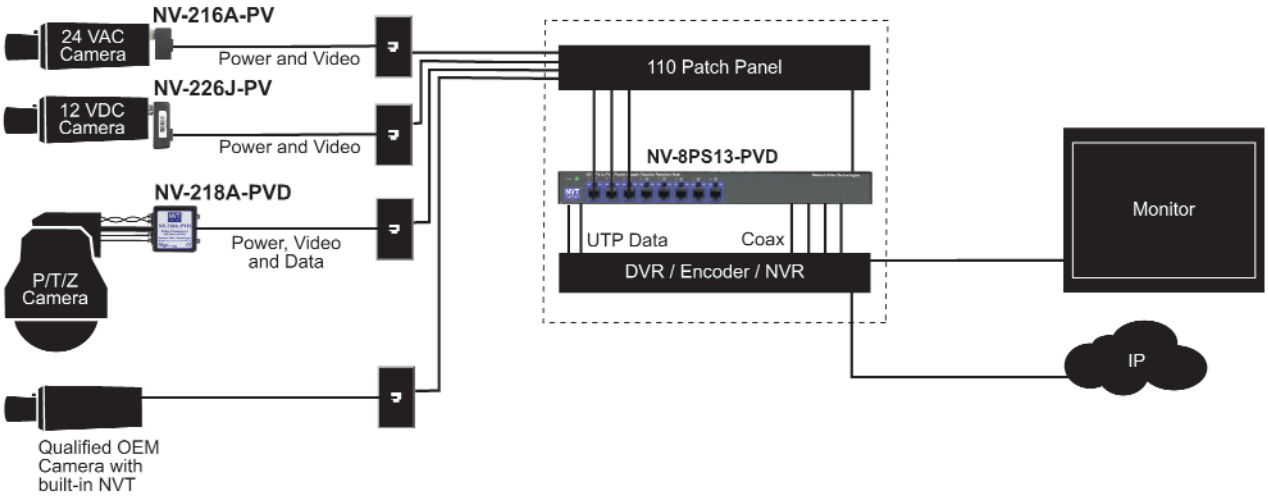


Specifications subject to change without notice.

Typical Application

Camera Location and Transmitter Connections

IDF / Telecoms Room or MDF / Control Room Receiver Connections



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